

Title (en)

Article comprising a temperature-insensitive Ta/Al-oxide based capacitive element

Title (de)

Temperatur-unempfindliches kapazitives Element auf Basis von Tantaloxid und Aluminumoxid

Title (fr)

Article comportant un élément capacitif insensible à la température à base d'oxyde de tantale et d'alumine

Publication

**EP 0838847 A2 19980429 (EN)**

Application

**EP 97308126 A 19971014**

Priority

US 73517096 A 19961022

Abstract (en)

Dielectric material of nominal composition  $(\text{Al}_2\text{O}_3)_x(\text{Ta}_2\text{O}_5)_{1-x}$ , with  $0.03 < x < 0.15$ , unexpectedly can exhibit a relatively small temperature variation of the dielectric constant (e.g., <50 ppm/ DEG C at 1 MHz and 20 DEG C) and a relatively large value of the dielectric constant. The dielectric according to the invention advantageously is used in capacitive elements, e.g., in MOS capacitors in integrated circuits for personal communication devices. <IMAGE>

IPC 1-7

**H01L 21/3205**; **H01G 4/10**

IPC 8 full level

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